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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,121	02/27/2002	Hiroshi Tsuda	826.1792	3398

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EXAMINER
NGUYEN, CINDY

ART UNIT	PAPER NUMBER
2161	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
Office Action Summary		10/083,121	TSUDA, HIROSHI
		Examiner	Art Unit	
		CINDY NGUYEN	2161	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 August 2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-3,6-9,22-26,28-30,33,34,37-39 and 54</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,6-9,22-26,28-30,33,34,37-39 and 54</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/16/08</u>

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____

DETAILED ACTION

This is response to amendment filed 08/22/08.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 04/16/08 is being

considered by the examiner.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new

ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

Claim 39 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

Regarding claim 39, "An apparatus " comprising a "collection unit", 'a popularity

degree calculation unit" and "a retrieval service unit" " are recited, however, an

apparatus comprising three units would reasonably be interpreted be on of ordinary skill

in the art as software per se (see specification, paragraph 0069). (see MPEP 2106).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill
in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
invention was made.

Claims 1-3, 6-9, 22-26, 28-30, 33, 34, 37, 38, 39 and 54 are rejected under 35

U.S.C. 103(a) as being unpatentable over Olstad et al. (US 20020032772, hereafter

Olstad) in view of Horvitz (US 6085226).

Regarding claims 1 and 26, Olstad discloses: a popularity degree calculation

method and a computer-readable storage medium that stores a program, for calculating

a popularity degree indicating the height of a popularity of a document in a network via

an apparatus connected with the network, comprising:

extracting the document updated or newly collected during a first time period

(i.e., periodically outputs data streams with information about new, updated or deleted

documents... see paragraph 0078, Olstad);

calculating the popularity degree for one of the extracted documents during the

first time period (see paragraphs 0079-0081, Olstad);

extracting a popularity degree from the calculated popularity degree during a second time period (see paragraphs 0081, 0082, Olstad);

However, Olstad didn't disclose: calculating a popularity transition degree indicating both a direction and a degree of transition of the popularity degree for each of the extracted documents based on the popularity degree during the first time period and the second time period, to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order and outputting the popularity transition degree. On the other hand, Horvitz discloses: calculating a popularity transition degree indicating both a direction and a degree of transition of the popularity degree for each of the extracted documents based on the popularity degree during the first time period and the second time period, to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order (see 615, 630, 645, and 650 fig. 6 and corresponding text see also the abstract) and outputting the popularity transition degree (col. 23, lines 48-20, Horvitz). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include probabilities transition in the system of Olstad as taught by Horvitz. The motivation being the technique uses available resources that would otherwise be available during periods of low activity, prefetch and cache appropriate pages or selected portions of those pages (see col. 3, lines 62 to col. 4, lines 6, Horvitz).

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Olstad/ Horvitz discloses: wherein the popularity

degree is calculated based on both a link relation of each of the extracted documents

and document location information indicating a location in the network of each of the

documents (see col. 23, lines 20-34, Horvitz).

Regarding claim 3, all the limitations of this claim have been noted in the

rejection of claim 2 above. In addition Olstad/ Horvitz discloses: wherein the popularity

degree is calculated based on features of a character string describing the document

location information (see paragraph 0089, Olstad).

Regarding claims 6, and 28, all the limitations of these claims have been noted in

the rejection of claims 1 and 26 above. In addition, Olstad/ Horvitz discloses: further

comprising: calculating a regression equation against a time of the popularity degree

calculated during the second time period (see paragraph 0079, Olstad).

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Regarding claims 7 and 29, all the limitations of these claims have been noted in

the rejection of claims 6, and 28 above. In addition, Olstad/ Horvitz discloses: wherein

the popularity transition degree is calculated based on a regression coefficient of the

regression equation (measuring transition probabilities... see col. 23, lines 20-26,

Horvitz)..

Regarding claims 8 and 30, all the limitations of these claims have been noted in

the rejection of claims 7 and 29 above. In addition, Olstad discloses: further comprising

determining transition tendency against the time of the popularity degree, based on an

intercept of the regression equation (col. 19, lines 30-55, Horvitz)..

Regarding claim 9, all the limitations of this claim have been noted in the

rejection of claim 6 above. In addition, Olstad discloses: further comprising:

determining an order of each document in the extracted documents, based on the

popularity degree calculated during the second time period (see paragraphs 0015,

0017, 0021, 0100. Olstad).

Regarding claim 22, all the limitations of these claims have been noted in the

rejection of claim 1. In addition, Olstad/Horvitz discloses: extracting a tag that is

contained in each of the extracted documents and designates user input (see

paragraphs 0054, 0059, 0060, Olstad).However, Olstad didn't disclose: judging the type

of the service provided by each of the documents, based on the tag that designates

user input (see col. 39, lines 33-43, Horvitz).

Regarding claim 23, all the limitations of this claim have been noted in the

rejection of claim 22 above. In addition, Olstad/ Horvitz discloses: further comprising:

determining that the document provides no service, if the document includes no tag

designating user input (see col. 41, lines 30-49, Horvitz).

Regarding claim 24, all the limitations of this claim have been noted in the rejection of claim 22 above. In addition, Olstad/ Horvitz discloses: wherein the service type provided by the document is judged based on the description of a button included in the document (i.e., type of link, on a current page... col. 40, lines 63-67, Horvitz).

Regarding claim 25, all the limitations of this claim have been noted in the rejection of claim 22 above. In addition, Olstad/ Horvitz discloses: wherein the service type provided by the document is judged based on a user input area included in the document (i.e., type of link, on a current page... col. 40, lines 63-67, Horvitz).

Regarding claim 33, all the limitations of this claim have been noted in the rejection of claim 1. It is therefore rejected as set forth above. In addition, Olstad/ Horvitz discloses: collecting documents from the network (see paragraphs 0017, 0021, Olstad); retrieving the document meeting retrieval conditions from the collected documents, based on the retrieval conditions (see paragraph 0021, Olstad); ranking the retrieved documents, based on the popularity degree (i.e., document rank value ...see paragraph 0078, Olstad); and outputting information about the retrieved documents, based on the ranking result (i.e., ranking the search result, see paragraph 0079, Olstad).

Regarding claim 34, all the limitations of this claim have been noted in the rejection of claim 33 above. In addition, Olstad/ Horvitz discloses: adding information

about the popularity transition degree to information about the retrieved documents (i.e.,

outputs data streams with information about new, updated documents... see paragraph

0078, Olstad).

Regarding claim 37, all the limitations of this claim have been noted in the

rejection of claims 23-25 and 33. It is therefore rejected as set forth above.

Regarding claim 38, all the limitations of this claim have been noted in the

rejection of claim 33 above. In addition, Olstad/ Horvitz discloses: receiving from a user

registration of both document location information indicating location in the network of a

specific document and a value (i.e., ...assign the document to a specific geographical

location...0089, Olstad); notifying the user of the fact that a popularity degree has

reached the value, when the popularity degree for the document specified by the

document location information has reached the value (see paragraph 0089, Olstad).

Regarding claim 39, all the limitations of these claims have been noted in

the rejection of claims 1, 26 and 33, In addition, Olstad/ Horvitz discloses: retrieving the

document meeting retrieval conditions from the collected documents based on the

retrieval conditions ; ranking the retrieved documents, based on the popularity degree;

and outputting information about the retrieved documents, based on the ranking result

(see paragraphs 0015, 0017, Olstad).

Regarding claim 54, all the limitations of this claim have been noted in the

rejection of claims 33 and 38. It is therefore rejected as set forth above.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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